

WHAT IS CLAIMED IS:

1. A variable capacitor system comprising:
 a substrate;
 a variable capacitor including a driving mechanism for varying capacitance stored by a pair of electrodes formed in a main surface of said substrate;
 a plurality of fixed capacitors having fixed capacitance stored by a plurality of pairs of electrodes formed in an opposite side of said main surface;
 wiring means for electrically connecting said variable capacitor and said fixed capacitors; and
 a switch disposed in said main surface of said substrate to electrically connect said variable capacitor and a capacitor or capacitors selected from said plurality of fixed capacitors.

2. A variable capacitor system according to Claim 1, wherein
 said variable capacitor includes first and second electrode layers formed on said main surface of said substrate with space therebetween and a driving mechanism for controlling said space between said first and second electrode layers; and

 said switch includes first and second wiring layers formed on said main surface of said substrate with space therebetween, a beam supported to said substrate and having a conductive junction, and a driving mechanism for bring said junction into

electrical contact with said first or second wiring layer.

3. A variable capacitor system according to Claim 1, wherein

said variable capacitor and said fixed capacitors are formed electrically in parallel, total capacitance of said fixed capacitors is larger than maximum capacitance of said variable capacitor, and said switch controls the number of said fixed capacitors connected electrically.

4. A variable capacitor system according to Claim 1, wherein

an interval of total fixed capacitance varied when total capacitance of said fixed capacitors connected to a circuit electrically by said switch is varied is smaller than a variable capacitance range of said variable capacitor.

5. A variable capacitor system according to Claim 1, wherein

an interval of total fixed capacitance varied when total capacitance of said fixed capacitors connected to a circuit electrically by said switch is varied is larger than a variable capacitance range of said variable capacitor.

6. A microswitch comprising:

a substrate;

first and second wiring layers formed on said substrate with space therebetween;

a beam supported to said substrate and having a conductive junction;

a driving mechanism for bring said junction into electrical contact with said first or second wiring layer; and

a temperature control mechanism for controlling temperature of said beam.

7. A microswitch according to Claim 6, wherein said beam is formed to be deformed by said driving mechanism so that said junction is brought into electrical contact with said first or second wiring layer, and said temperature control mechanism is formed on a back side of a surface of said substrate in which said beam is formed.

8. A transmitter-receiver comprising:
a plurality of antennas;
an antenna changing-over switch for changing over said antenna;

an amplifier supplied with a signal received by said antenna through said antenna changing-over switch;

a control IC supplied with a signal produced by said amplifier and for producing an output signal;
and

a temperature control mechanism for controlling temperature of said antenna changing-over switch;

said antenna changing-over switch including:

a substrate;

first and second wiring layers formed on said substrate with space therebetween; and

a beam supported to said substrate and having an electrode brought into electrical contact with said first or second wiring layer.

9. A transmitter-receiver according to Claim 8, wherein

said beam is formed movably so as to bring said electrode into electrical contact; and

an insulating layer is formed between said substrate and said first or second wiring layer;

a layer constituting said temperature control mechanism being formed between said substrate and said insulating layer.

10. A transmitter-receiver according to Claim 8, wherein

said temperature control mechanism is disposed on an opposite side of a surface of said substrate on which said beam is formed.

11. A receiver comprising:

a plurality of antennas provided in corresponding manner to frequencies;

an antenna switch for switching electrical connection to said antennas;

a filter for removing noise from a signal supplied from said antenna through said antenna switch;

an amplifier for amplifying a signal passing

through said filter; and

a control IC supplied with a signal produced by said amplifier and for producing an output signal;

said antenna switch and said filter being disposed in a first substrate, said control IC being disposed in a second substrate.

12. A receiver according to Claim 11, comprising a temperature control mechanism disposed in said first substrate.

13. A transmitter-receiver comprising:

a plurality of antennas provided in corresponding manner to frequencies;

an antenna switch for switching electrical connection to said antennas;

a filter for removing noise from a signal supplied from said antenna through said antenna switch;

an amplifier for amplifying a signal passing through said filter;

a control IC supplied with a signal produced by said amplifier and for producing an output signal; and

a heat transportation mechanism for transporting heat generated by said control IC to said antenna switch or said filter.

14. A transmitter-receiver comprising:

a plurality of antennas provided in corresponding manner to frequencies;

an antenna switch for switching electrical

connection to said antennas;

a filter for removing noise from a signal supplied from said antenna through said antenna switch;

an amplifier for amplifying a signal passing through said filter;

a control IC supplied with a signal produced by said amplifier and for producing an output signal; and

a radiation veer disposed in said substrate in which said control IC is formed.

15. A transmitter-receiver comprising:

a plurality of antennas provided in corresponding manner to frequencies;

an antenna switch for switching electrical connection to said antennas;

a filter for removing noise from a signal supplied from said antenna through said antenna switch;

an amplifier for amplifying a signal passing through said filter; and

a control IC supplied with a signal produced by said amplifier and for producing an output signal;

a thermoelectric element disposed in a substrate in which said control IC is formed.